

# Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



# Maine Agricultural Experiment Station

BULLETIN No. 51.

APRIL, 1899.

## FEEDING STUFF INSPECTION.

---

This Bulletin contains the analyses of samples of Feeding Stuffs collected by the inspectors in January, 1899. A few copies of Bulletin No. 48, which gives the analyses of samples collected in November, are still available for distribution.

---

Requests for the Bulletins should be addressed to the

AGRICULTURAL EXPERIMENT STATION,

Orono, Maine.

869  
E4

MAINE  
AGRICULTURAL EXPERIMENT STATION  
ORONO, MAINE.

---

THE STATION COUNCIL.

PRESIDENT ABRAM W. HARRIS . . . . .	<i>President</i>
DIRECTOR CHARLES D. WOODS . . . . .	<i>Secretary</i>
BENJAMIN F. BRIGGS, Auburn . . . . .	} <i>Committee of Board of Trustees</i>
ARTHUR L. MOORE, Camden . . . . .	
ELLIOTT WOOD, Winthrop . . . . .	
B. WALKER MCKEEN, Fryeburg . . . . .	<i>State Board of Agriculture</i>
OTIS MEADER, Albion . . . . .	<i>State Grange</i>
CHARLES S. POPE, Manchester . . . . .	<i>State Pomological Society</i>
JAMES M. BARTLETT . . . . .	} <i>Members of the Station Staff.</i>
LUCIUS H. MERRILL . . . . .	
FRANCIS L. HARVEY . . . . .	
FREMONT L. RUSSELL . . . . .	
WELTON M. MUNSON . . . . .	
GILBERT M. GOWELL . . . . .	

THE STATION STAFF.

THE PRESIDENT OF THE UNIVERSITY.

CHARLES D. WOODS . . . . .	<i>Director</i>
JAMES M. BARTLETT . . . . .	<i>Chemist</i>
LUCIUS H. MERRILL . . . . .	<i>Chemist</i>
FRANCIS L. HARVEY . . . . .	<i>Botanist and Entomologist</i>
FREMONT L. RUSSELL . . . . .	<i>Veterinarian</i>
WELTON M. MUNSON . . . . .	<i>Horticulturist</i>
GILBERT M. GOWELL . . . . .	<i>Agriculturist</i>
LUCIUS J. SHEPARD . . . . .	<i>Assistant Horticulturist</i>
ORA W. KNIGHT . . . . .	<i>Assistant Chemist</i>
ANDREW J. PATTEN . . . . .	<i>Assistant Chemist</i>
HORACE L. WHITE . . . . .	<i>Assistant Chemist</i>

## FEEDING STUFF INSPECTION.

CHAS. D. WOODS.

Samples of the feeding stuffs coming under the inspection law, drawn in November, 1898, were analyzed and the results were published in January, 1899, as bulletin 48 of the Station. The inspectors visited most of the larger dealers again in January. At this time, samples were drawn from goods which had not been previously sampled and the results of the analyses are given in the pages which follow. In addition to the analyses here reported quite a large number of samples sent to the Station by correspondents have been analyzed and the results sent to them. In only one instance have correspondents' samples shown inferior goods and that is discussed below. The results of these analyses are not here reported as they agree substantially with the official samples.

*Cotton Seed Meal.* During the year about 200 samples of cotton seed meal have been examined, chiefly from the dairy sections of the State including the counties of Hancock, Waldo, Penobscot, Piscataquis and the whole of the State west of the Kennebec. Of these samples, two were low grade, *unguaranteed* goods in Hancock county. Upon writing the dealers calling attention to the violations of the law in selling unbranded goods, they took the necessary steps to conform to the law. Three samples of low grade goods found in Androscoggin and Penobscot counties were from the same wholesale house. The firm claimed that their shipper made a mistake in tagging one of the Androscoggin cotton seed meals and that instead of having tags guaranteeing 43 per cent of protein, the meal should have carried tags guaranteeing 25 per cent. The change of tags were made.

The other Androscoggin and the Penobscot county low grade meal was from the same car. This was one of ten cars bought by the wholesale house. As soon as notified of the inferior quality of the goods the guarantee was changed on the stock in the hands of the retailers and the order for the other cars (not then delivered) was countermanded. The law in this instance not only brought it about that the low grade goods in the State were properly guaranteed, but through its operation a number of cars of low grade cotton seed meal were kept out of the State.

[Continued on page 10.]

## MANUFACTURERS AND PLACE OF SAMPLING.

Station Number.	Manufacturer or Jobber.	Manufactured at	Sampled at
8485	American Cotton Oil Co . . . .	Huntsville, Ala....	Brownfield .....
8486	American Cotton Oil Co .....	Brinkley, Ark .....	Fryeburg ....
8487	American Cotton Oil Co .....	Little Rock, Ark..	South Windham...
8493	American Cotton Oil Co . . . .	Nashville, Tenn ...	West Falmouth...
8505	American Cotton Oil Co .....	Nashville, Tenn....	Lock Mills .....
8484	American Cotton Oil Co .....	.....	Camden .....
8506	American Cotton Oil Co .....	.....	Dover .....
8494	The Southern Cotton Oil Co ....	Memphis, Tenn....	Bath .....
8495	The Southern Cotton Oil Co ....	Memphis, Tenn....	Sebago Lake.....
8496	The Southern Cotton Oil Co ....	Memphis, Tenn....	Hampden .....
8497	The Southern Cotton Oil Co ....	Memphis, Tenn ...	Bangor .....
8498	The Southern Cotton Oil Co ....	Memphis, Tenn....	Westbrook .....
8499	The Southern Cotton Oil Co ....	Memphis, Tenn....	Waldoboro .....
8500	The Southern Cotton Oil Co ....	Memphis, Tenn....	Brunswick .....
8625	The Southern Cotton Oil Co ....	Memphis, Tenn....	Phillips .....
8538	The Southern Cotton Oil Co ...	Memphis, Tenn....	Berwick . ....
8501	The Southern Cotton Oil Co ....	Newport, Ark .....	Houlton ....
8502	The Southern Cotton Oil Co ....	Newport, Ark .....	Newport.....
8503	The Southern Cotton Oil Co ....	Newport, Ark .....	Dexter .....
8504	The Southern Cotton Oil Co ....	Newport, Ark .....	Stroudwater .....
8478	O. Holway & Co.....	.....	Greene .....
8617	O. Holway & Co.....	.....	Readfield.....
8515	*.....	.....	Dover .....
8523	R. B. Brown Oil Co.....	St. Louis, Mo.....	Pittsfield .....
8524	R. B. Brown Oil Co.....	St. Louis, Mo.....	Bath .....
8525	.....	St. Louis, Mo.....	Dexter ..
8618	.....	St. Louis, Mo.....	Norridgewock ....
8479	Chapin & Co.....	St. Louis, Mo .....	Belfast .....
8509	Chapin & Co.....	St. Louis, Mo.....	Milo .....
8510	Chapin & Co.....	St. Louis, Mo. ....	Bangor .....
8511	Chapin & Co.....	St. Louis, Mo.....	Newport.....
8512	Chapin & Co.....	St. Louis, Mo.....	Belfast .....
8513	Chapin & Co .....	St. Louis, Mo.....	Portland.....
8514	Chapin & Co.....	St. Louis, Mo.....	Orrington .....
8541	Chapin & Co .....	St. Louis, Mo.....	North Fayette ....
8488	F. W. Brod�� & Co.....	Memphis, Tenn....	Hiram .....
8489	F. W. Brod�� & Co.....	Memphis, Tenn....	Cornish .....
8490	F. W. Brod�� & Co.....	Memphis, Tenn....	Richmond .....
8491	F. W. Brod�� & Co.....	Memphis, Tenn....	Dexter .....
8492	F. W. Brod�� & Co .....	Memphis, Tenn....	Winterport .....
8507	F. W. Brod�� & Co .....	Memphis, Tenn....	Westbrook ...
8508	F. W. Brod�� & Co .....	Memphis, Tenn....	East Poland.....
8619	F. W. Brod�� & Co .....	Memphis, Tenn....	Norridgewock ....
8645	F. W. Brod�� & Co .....	Memphis, Tenn....	Bethel .....
8650	F. W. Brod�� & Co .....	Memphis, Tenn....	Albion .....
8519	*.....	.....	Norway .....
8520	*.....	.....	Bangor .....
8521	*.....	.....	Bucksport.....

\*Brand incomplete. Name of manufacturer and place of business not given.



## ANALYSES OF SAMPLES.

Name of Feed.	PROTEIN.		FAT.		Station Number.
	Found— per cent.	Guaranteed per cent.	Found— per cent.	Guaranteed per cent.	
Prime Cotton Seed Meal .....	43.44	43.00	9.64	9.00	8485
Prime Cotton Seed Meal .....	40.25	43.00	10.27	9.00	8486
Prime Cotton Seed Meal .....	45.50	43.00	9.86	9.00	8487
Prime Cotton Seed Meal .....	45.00	43.00	10.39	9.00	8493
Prime Cotton Seed Meal .....	45.69	43.00	10.54	9.00	8505
Prime Cotton Seed Meal .....	46.00	43.00	9.96	9.00	8484
Prime Cotton Seed Meal .....	45.63	43.00	11.01	9.00	8506
Prime Finely Ground Cotton Seed Meal	41.38	43.00	11.32	9.00	8494
Prime Finely Ground Cotton Seed Meal	42.50	43.00	10.51	9.00	8495
Prime Finely Ground Cotton Seed Meal	43.13	43.00	12.21	9.00	8496
Prime Finely Ground Cotton Seed Meal	44.19	43.00	12.38	9.00	8497
Prime Finely Ground Cotton Seed Meal	42.81	43.00	12.26	9.00	8498
Prime Finely Ground Cotton Seed Meal	42.88	43.00	11.55	9.00	8499
Prime Finely Ground Cotton Seed Meal	42.88	43.00	11.39	9.00	8500
Prime Finely Ground Cotton Seed Meal	46.50	43.00	10.58	9.00	8625
Prime Finely Ground Cotton Seed Meal	44.06	43.00	12.02	9.00	8538
Prime Finely Ground Cotton Seed Meal	45.25	41.00	10.48	9.00	8501
Prime Finely Ground Cotton Seed Meal	45.63	41.00	11.46	9.00	8502
Prime Finely Ground Cotton Seed Meal	45.50	41.00	10.63	9.00	8503
Prime Finely Ground Cotton Seed Meal	45.13	41.00	10.62	9.00	8504
Prime Memphis Cotton Seed Meal.....	24.44	25.50	7.35	5.71	8478
Prime Memphis Cotton Seed Meal. ...	23.94	25.50	6.60	5.71	8617
Prime Memphis Cotton Seed Meal.....	45.13	43.00	13.49	9.00	8515
Prime Cotton Seed Meal .....	44.56	43.00	13.61	9.00	8523
Prime Cotton Seed Meal .....	45.75	43.00	12.83	9.00	8524
Prime Cotton Seed Meal .....	23.31	43.00	6.57	9.00	8525
Prime Cotton Seed Meal .....	22.38	43.00	6.77	9.00	8618
Cotton Seed Meal .....	42.50	43.00	10.06	9.00	8479
Cotton Seed Meal .....	45.50	43.00	9.25	9.00	8509
Cotton Seed Meal .....	45.25	43.00	10.10	9.00	8510
Cotton Seed Meal .....	44.81	43.00	10.44	9.00	8511
Cotton Seed Meal .....	42.38	43.00	9.37	9.00	8512
Cotton Seed Meal .....	42.63	43.00	11.02	9.00	8513
Cotton Seed Meal .....	45.06	43.00	9.54	9.00	8514
Cotton Seed Meal .....	44.25	43.00	10.23	9.00	8541
Owl Brand Cotton Seed Meal.....	43.50	43.00	12.89	9.00	8488
Owl Brand Cotton Seed Meal.....	45.13	43.00	9.38	9.00	8489
Owl Brand Cotton Seed Meal.....	45.63	43.00	13.40	9.00	8490
Owl Brand Cotton Seed Meal.....	43.94	43.00	10.98	9.00	8491
Owl Brand Cotton Seed Meal.....	48.69	43.00	10.31	9.00	8492
Owl Brand Cotton Seed Meal.....	45.50	43.00	9.96	9.00	8507
Owl Brand Cotton Seed Meal. ....	45.06	43.00	10.15	9.00	8508
Owl Brand Cotton Seed Meal. ....	44.81	43.00	10.73	9.00	8619
Owl Brand Cotton Seed Meal. ....	42.80	43.00	10.19	9.00	8645
Owl Brand Cotton Seed Meal.....	45.44	43.00	10.34	9.00	8650
“Daisy Brand” Cotton Seed Meal.....	45.06	43.00	9.42	9.00	8519
“Daisy Brand” Cotton Seed Meal... ..	42.88	43.00	14.08	9.00	8520
“Daisy Brand” Cotton Seed Meal.....	45.88	43.00	9.86	9.00	8521

## MANUFACTURERS—Continued.

Station Number.	Manufacturer or Jobber.	Manufactured at	Sampled at
8522	*.....	.....	Portland .....
8643	*.....	.....	Rumford .....
8482	D. M. Hawkins & Co.....	Memphis, Tenn ..	Bowdoinham .....
8483	D. M. Hawkins & Co.....	Memphis, Tenn....	Portland .....
8624	D. M. Hawkins & Co.....	Memphis, Tenn....	Farmington .....
8516	Hunter Bros .....	.....	Dexter.....
8517	Hugh Petit & Co .....	.....	Mechanic Falls ....
8526	J. E. Soper & Co .....	.....	Yarmouth .....
8527	J. E. Soper & Co .....	.....	Corinna .....
8529	J. E. Soper & Co .....	.....	Mechanic Falls ....
8528	Dyersburg Oil & Fertilizer Co..	Dyersburg, Tenn ..	Belfast .. .....
8536	Dyersburg Oil & Fertilizer Co..	Dyersburg, Tenn ..	South Berwick.....
8539	Doten Grain Co.....	.....	Waterboro .....
8530	*.....	.....	Steep Falls.....
8531	*.....	.....	Dexter .....
8534	*.....	.....	Portland.....
8537	*.....	.....	Springvale .....
8518	*.....	.....	West Peru.....
8626	*.....	.....	Wilton.....
8653	*.....	.....	Augusta .....
8623	*.....	.....	Winthrop .....
8622	*.....	.....	Lewiston .....
8621	*.....	.....	Livermore Falls...
8620	*.....	.....	North Anson .....
8532	*.....	.....	Gorham .....
8533	*.....	.....	South Paris.....
8644	*.....	.....	Hartford .....
8481	*.....	.....	Orland .....
8542	The Glucose Sugar Refining Co.	.....	Richmond .....
8548	The Glucose Sugar Refining Co.	.....	Belfast .....
8554	The Glucose Sugar Refining Co.	.....	Camden .....
8544	The Glucose Sugar Refining Co.	.....	Hampden .....
8551	The Glucose Sugar Refining Co.	.....	East Poland.....
8543	The Glucose Sugar Refining Co.	.....	Portland .....
8545	The Glucose Sugar Refining Co.	.....	Bucksport.....
8546	The Glucose Sugar Refining Co.	.....	Orrington .....
8547	The Glucose Sugar Refining Co.	.....	Winterport.....
8549	The Glucose Sugar Refining Co.	.....	Bangor .....
8550	The Glucose Sugar Refining Co.	.....	Pittsfield .....
8552	The Glucose Sugar Refining Co.	.....	Norway. ....
8553	The Glucose Sugar Refining Co.	.....	Dover .....
8630	The Glucose Sugar Refining Co.	.....	Lewiston .....
8555	Charles Pope Glucose Co .....	.....	Brunswick .....
8556	Charles Pope Glucose Co .....	.....	Gorham .....
8557	Charles Pope Glucose Co .....	.....	Bath .....
8558	Charles Pope Glucose Co .....	.....	Portland .....
8559	Charles Pope Glucose Co .....	.....	Wiscasset .....
8560	Charles Pope Glucose Co .....	.....	Saco .....

\* Brand incomplete. Name of manufacturer and place of business not given.



## ANALYSES—Continued.

Name of Feed.	PROTEIN.		FAT.		Station Number.
	Found— per cent.	Guaranteed— per cent.	Found— per cent.	Guaranteed— per cent.	
"Daisy Brand" Cotton Seed Meal.....	45.38	43.00	10.32	9.00	8522
"Daisy Brand" Cotton Seed Meal.....	45.31	43.00	10.41	9.00	8643
Cotton Seed Meal ... ..	44.81	43.00	10.64	9.00	8482
Cotton Seed Meal .....	43.38	43.00	10.57	9.00	8483
Cotton Seed Meal .....	42.63	43.00	11.07	9.00	8624
Cotton Seed Meal .....	45.13	43.00	9.36	9.00	8516
Cotton Seed Meal .....	48.38	43.00	8.03	10.00	8517
Cotton Seed Meal .....	43.69	43.00	10.73	9.00	8526
Cotton Seed Meal ... ..	44.44	43.00	11.33	9.00	8527
Cotton Seed Meal .....	41.19	43.00	11.65	9.00	8529
Cotton Seed Meal .. ..	45.56	43.00	9.54	9.00	8528
Cotton Seed Meal .....	43.81	43.00	9.04	9.00	8536
Cotton Seed Meal .....	43.69	43.00	12.16	9.00	8539
Cotton Seed Meal .....	46.19	43.00	9.81	9.00	8530
Cotton Seed Meal .....	46.81	43.00	11.59	9.00	8531
Cotton Seed Meal .....	44.94	43.00	10.49	9.00	8534
Cotton Seed Meal .....	43.06	43.00	13.33	9.00	8537
Cotton Seed Meal .. ..	46.69	43.00	9.21	9.00	8518
Cotton Seed Meal .....	46.50	43.00	9.97	9.00	8626
Cotton Seed Meal .....	44.56	43.00	14.46	9.00	8653
Cotton Seed Meal .....	44.81	46.12	10.34	9.20	8623
Cotton Seed Meal .....	43.75	46.12	11.79	9.20	8622
Cotton Seed Meal .....	44.19	46.12	12.24	9.20	8621
Cotton Seed Meal .....	42.81	46.12	10.68	9.20	8620
Cotton Seed Meal .....	43.38	.....	10.69	.....	8532
Cotton Seed Meal .....	44.31	.....	9.79	.....	8533
Cotton Seed Meal .....	42.56	.....	10.26	.....	8644
Cotton Seed Meal .. ..	26.63	.....	7.56	.....	8481
Chicago Gluten Meal .....	37.44	38.00	3.27	2.00	8542
Chicago Gluten Meal ... ..	36.69	38.00	2.65	2.00	8548
Chicago Gluten Meal .....	37.19	38.00	3.02	2.00	8554
Chicago Gluten Meal .....	36.75	38.00	3.07	2.00	8544
Chicago Gluten Meal .....	38.81	38.00	2.75	2.00	8551
Chicago Gluten Meal .....	38.31	38.00	3.13	2.00	8543
Chicago Gluten Meal .....	34.50	38.00	3.61	2.00	8545
Chicago Gluten Meal .....	35.69	38.00	2.73	2.00	8546
Chicago Gluten Meal .....	38.06	38.00	3.36	2.00	8547
Chicago Gluten Meal .....	38.94	38.00	2.27	2.00	8549
Chicago Gluten Meal .....	37.94	38.00	2.71	2.00	8550
Chicago Gluten Meal .....	37.44	38.00	3.17	2.00	8552
Chicago Gluten Meal .....	38.25	38.00	3.27	2.00	8553
Chicago Gluten Meal ... ..	37.88	38.00	3.16	2.00	8630
Cream Gluten Meal .....	32.63	37.12	4.91	3.20	8555
Cream Gluten Meal .....	35.25	37.12	3.12	3.20	8551
Cream Gluten Meal .....	34.56	37.12	4.65	3.20	8557
Cream Gluten Meal .....	33.56	37.12	4.84	3.20	8558
Cream Gluten Meal .....	32.19	37.12	4.39	3.20	8559
Cream Gluten Meal .. ..	30.13	37.12	1.84	3.20	8560

## MANUFACTURERS—Continued.

Station Number.	Manufacturer or Jobber.	Manufactured at	Sampled at
8633	Charles Pope Glucose Co .....	.....	Lewiston .....
8562	National Starch Manf'g Co .....	Indianapolis, Ind..	Bowdoinham .....
8568	National Starch Manf'g Co .....	Indianapolis, Ind..	Milo .....
8569	National Starch Manf'g Co .....	Indianapolis, Ind..	Foxcroft .....
8563	National Starch Manf'g Co .....	Des Moines, Ia.....	Old Town .....
8561	National Starch Manf'g Co .....	Des Moines, Ia.....	Sebago Lake .....
8564	National Starch Manf'g Co .....	Des Moines, Ia.....	Brunswick .....
8565	National Starch Manf'g Co .....	Des Moines, Ia.....	Dexter.. .....
8567	National Starch Manf'g Co .....	Des Moines, Ia.....	Norway.....
8629	National Starch Manf'g Co .....	Des Moines, Ia....	Livermore Falls...
8566	National Starch Manf'g Co .....	Des Moines, Ia.....	Steep Falls .....
8627	National Starch Manf'g Co .....	Des Moines, Ia.....	Bingham .....
8628	National Starch Manf'g Co .....	Des Moines, Ia.....	Winthrop .....
8570	The Glucose Sugar Refining Co. ....	.....	South Paris .....
8571	The Glucose Sugar Refining Co. ....	.....	West Paris .....
8572	The Glucose Sugar Refining Co. ....	.....	Guilford .....
8573	The Glucose Sugar Refining Co. ....	.....	Damariscotta .....
8631	The Glucose Sugar Refining Co. ....	.....	Farmington .....
8632	The Glucose Sugar Refining Co. ....	.....	Readfield Depot ...
8574	International Milling Co .....	.....	Brunswick .....
8575	International Milling Co .....	.....	Richmond .....
8634	International Milling Co ..	.....	Lewiston .....
8576	The Cleveland Linseed Oil Co. ....	.....	Brownfield .....
8648	Mayflower Mills .....	Fort Wayne, Ind..	Bath .....
8577	E. W. Blatchford & Co .....	Chicago, Ill .....	Brunswick .....
8587	American Cereal Co.....	.....	Belfast .....
8588	American Cereal Co.....	.....	Bowdoinham .....
8589	American Cereal Co.....	.....	Bangor .....
8590	American Cereal Co.....	.....	Bucksport.....
8591	American Cereal Co.....	.....	Portland .....
8592	American Cereal Co.....	.....	Foxcroft.....
8593	American Cereal Co.....	.....	Island Falls .....
8594	American Cereal Co.....	.....	Bethel .....
8595	American Cereal Co.....	.....	Waldoboro .....
8636	American Cereal Co.....	.....	Farmington ..
8637	American Cereal Co.....	.....	Bingham .....
8596	S. A. & J. H. True Co .....	.....	Bath .....
8597	S. A. & J. H. True Co .....	.....	Portland ..
8598	Commercial Milling Co.....	.....	Ashland .....
8599	David Oliver.....	Joliet, Ill .....	Fryeburg .....
8600	The H-O Co .....	Buffalo, N. Y. ....	Bowdoinham .....
8601	The H-O Co .....	Buffalo, N. Y. ....	South Windham ...
8602	The H-O Co .....	Buffalo, N. Y. ....	Portland ....
8635	The H-O Co .....	Buffalo, N. Y. ....	Phillips .....
8639	The H-O Co .....	.....	Winthrop .....
8603	The H-O Co .....	Buffalo, N. Y. ....	North Yarmouth...
8604	The H-O Co ..	Buffalo, N. Y. ....	North Yarmouth...
8605	The H-O Co .....	Buffalo, N. Y. ....	North Yarmouth...

## ANALYSES—Continued.

Name of Feed.	PROTEIN.		FAT.		Station Number.
	Found— per cent.	Guaranteed— per cent.	Found— per cent.	Guaranteed— per cent.	
Cream Gluten Meal.....	34.31	37.12	3.91	3.20	8633
King Gluten Meal.....	35.31	32.00	4.07	16.00	8562
King Gluten Meal.....	34.50	32.00	6.78	16.00	8568
King Gluten Meal.....	36.25	32.00	6.17	16.00	8569
King Gluten Meal.....	32.06	32.00	15.90	16.00	8563
King Gluten Meal ..	32.88	32.00	16.38	16.00	8561
King Gluten Meal.....	33.88	32.00	16.91	16.00	8564
King Gluten Meal.....	33.19	32.00	16.46	16.00	8565
King Gluten Meal.....	33.94	32.00	14.50	16.00	8567
King Gluten Meal.....	33.75	32.00	16.79	16.00	8629
King Gluten Meal.....	34.94	34.26	15.71	14.65	8566
King Gluten Meal ..	32.06	32.00	15.84	9.00	8627
King Gluten Meal.....	32.38	32.00	12.89	12.00	8628
Buffalo Gluten Feed .....	27.00	25.50	4.00	4.00	8570
Rockford Diamond Gluten Feed.....	24.56	24.20	4.54	3.76	8571
Rockford Diamond Gluten Feed .....	25.25	24.20	4.16	3.76	8572
Rockford Diamond Gluten Feed.....	21.31	24.20	5.02	3.76	8573
Rockford Diamond Gluten Feed.....	25.31	24.20	5.03	3.76	8631
Rockford Diamond Gluten Feed.....	25.25	24.20	4.67	3.76	8632
Sucrene Oil Meal.....	26.44	24.75	3.33	3.50	8574
Sucrene Oil Meal.....	23.63	24.75	3.26	3.50	8575
Sucrene Oil Meal.....	26.44	24.75	3.44	3.50	8634
Cleveland Flax Meal .....	37.00	39.00	3.03	1.50	8576
Old Process Linseed Meal .....	25.44	.....	8.92	....	8648
Blatchford's Calf Meal .....	24.94	.....	4.41	.....	8577
Victor Corn and Oat Feed... ..	11.25	9.46	4.65	3.92	8587
Victor Corn and Oat Feed. ....	10.69	9.46	4.78	3.92	8588
Victor Corn and Oat Feed.. ..	8.63	9.46	3.44	3.92	8589
Victor Corn and Oat Feed.....	8.75	9.46	3.72	3.92	8590
Victor Corn and Oat Feed.....	8.56	9.46	3.80	3.92	8591
Victor Corn and Oat Feed .....	9.13	9.46	3.82	3.92	8592
Victor Corn and Oat Feed.....	9.63	9.46	4.63	3.92	8593
Victor Corn and Oat Feed. ....	7.81	9.46	3.23	3.92	8594
Victor Corn and Oat Feed.....	10.38	9.46	5.12	3.92	8595
Victor Corn and Oat Feed ..	8.56	9.46	3.68	3.92	8636
Victor Corn and Oat Feed.....	9.69	9.46	3.66	3.92	8637
Corn and Oat Feed. ....	9.13	9.63	3.42	4.23	8596
Corn and Oat Feed.....	9.19	9.63	3.39	4.23	8597
Ground Corn and Oats .....	9.44	.....	2.89	.....	8598
Lakeside Corn and Oat Feed.....	8.44	9.50	3.24	3.75	8599
Dundee Corn and Oat Feed.....	8.88	8.38	3.30	2.95	8600
Dundee Corn and Oat Feed....	9.00	8.38	3.11	2.95	8601
Dundee Corn and Oat Feed.....	8.19	8.38	2.69	2.95	8602
Dundee Corn and Oat Feed.....	9.25	8.38	3.67	2.95	8635
Monarch Corn and Oat Feed .....	12.31	10.25	7.12	7.49	8639
The H-O Co.'s Standard Dairy Feed. ..	16.50	18.75	4.48	7.25	8603
The H-O Co.'s Horse Feed.....	11.00	12.30	4.42	4.90	8604
The H-O Co.'s Poultry Feed.....	17.31	16.80	5.62	7.00	8605

## MANUFACTURERS—Concluded.

Station Number.	Manufacturer or Jobber.	Manufactured at	Sampled at
8606	The H-O Co .....	Buffalo, N. Y.....	Bowdoinham ... ..
8607	The American Cereal Co .....	.....	Brunswick .....
8608	The American Cereal Co .....	.....	North Yarmouth...
8609	The American Cereal Co .....	.....	Westbrook .....
8610	The American Cereal Co .....	.....	Richmond .....
8611	The American Cereal Co .....	.....	Bath .....
8612	The American Cereal Co .....	.....	Portland .....
8613	The American Cereal Co .....	.....	Belfast .....
8614	The American Cereal Co .....	.....	Foxcroft .....
8615	The American Cereal Co .....	.....	Waldoboro .....
8616	W. H. Haskell & Co.....	Toledo, O.....	West Falmouth...
8638	Andrew Cullen .....	.....	Madison .....
8480	Northwestern Fertilizer Co....	.....	Portland.....
8585	Northwestern Fertilizer Co....	.....	Winterport .....
8578	Bradley Fertilizer Co .....	.....	Bangor .....
8579	Bradley Fertilizer Co .....	.....	Portland.....
8583	Bowker Fertilizer Co .....	Boston, Mass.....	Portland.....
8580	Bowker Fertilizer Co .....	Boston, Mass.....	Bangor .....
8581	Bowker Fertilizer Co .....	Boston, Mass.. ....	Portland .....
8582	Bowker Fertilizer Co .....	Boston, Mass. ....	Waldoboro .....
8584	B. Randall.....	East Boston, Mass.,	Bowdoinham .....
8586	American Fertilizer Co.....	.....	Bowdoinham .....

[Continued from page 3.]

In March a correspondent in Cumberland county sent a sample of very low grade cotton seed meal to the Station. This was one of two cars brought into the State by a wholesale house. As soon as their attention was called to the matter, the sale of the meal was stopped, that in the hands of the retailer was returned to them and together with the other car was sold into New Hampshire, which State is not protected by a law regulating the sale of feeding stuffs. This lot of meal was one of the poorest examined by the Station, and probably occasioned considerable loss from the shrinkage of milk flow as nearly a car-load of it was sold in two towns before its poor quality was known. Much of the meal was fine and of fairly good appearance. The dealers claim that it has a *commercial* value equal to high grade cotton seed meal as fineness and brightness determine that. The meal had an *agricultural* value of less than one-half its guarantee.

In none of the above instances was there any evident intention of fraud. The dealers as soon as notified, and without wait-



## ANALYSES—Concluded.

Name of Feed.	PROTEIN.		FAT.		Station Number.
	Found— per cent.	Guaranteed per cent.	Found— per cent.	Guaranteed per cent.	
The H-O Co.'s, Poultry Feed.....	17.44	16.80	5.87	7.00	8606
Amercam Cereal Co.'s Poultry Food...	13.44	.....	5.79	.....	8607
American Cereal Co.'s Poultry Food...	13.69	.....	5.93	.....	8608
Quaker Oat Feed.....	9.25	12.03	3.99	3.49	8609
Quaker Oat Feed.....	9.63	12.03	3.08	3.49	8610
Quaker Oat Feed.....	8.94	12.03	3.46	3.49	8611
Quaker Oat Feed.....	10.75	12.03	3.77	3.49	8612
Quaker Oat Feed.....	10.81	12.03	4.00	3.49	8613
Quaker Oat Feed.....	7.75	12.03	3.04	3.49	8614
Quaker Oat Feed.....	11.69	12.03	4.30	3.49	8615
Haskell's Oat Feed.....	9.50	9.62	6.51	7.66	8616
Crescent Oat Feed.....	7.81	10.90	2.99	3.70	8638
Horse Shoe Brand Ground Beef Crack- lings for Poultry.....	64.63	60.00	19.61	16.00	8480
Horse Shoe Brand Ground Beef Crack- lings for Poultry.....	66.44	60.00	16.95	16.00	8585
Bradley's Superior Meat Meal.....	52.25	40.00	9.40	15.00	8578
Bradley's Superior Meat Meal.....	53.94	40.00	9.48	15.00	8579
Bowker's Pure Beef Scraps.....	51.88	.....	14.89	.....	8583
Bowker's Animal Meal.....	42.13	30.00	12.45	5.00	8580
Bowker's Animal Meal.....	46.94	30.00	10.69	5.00	8581
Bowker's Animal Meal.....	39.69	30.00	11.21	5.00	8582
Pure Beef Scraps.....	47.44	.....	23.08	.....	8584
American Poultry Meal.....	38.06	.....	22.44	.....	8586

ing for an official notice from the Secretary of Agriculture, either stopped the sale of the goods, or made a guarantee corresponding to the facts. Although the law did not keep these goods out of the State, it has completely prevented their being knowingly sold.

To avoid this class of goods, dealers and consumers should use only reliable brands of cotton seed meal and should send samples of all goods to the Station for free analysis as offered on the last page of this bulletin.

*Gluten Meal.* With one exception, Chicago Gluten Meal was well up to guarantee in protein. The manufacturers are not sending the Indianapolis King Gluten into the State at present. The Des Moines King Gluten is well up to guarantee. The Chas. Pope Glucose Co.'s Cream Gluten meal continues to fall below the guarantee. Unless the quality is changed for the better, the consumer cannot count on Gream Gluten Meal to carry more than 33 per cent protein.



## SUMMARY OF ANALYSES.

	Number of analyses.		PROTEIN.		FAT.	
			Found— per cent.	Guaranteed— per cent.	Found— per cent.	Guaranteed— per cent.
American Cotton Oil Co.'s Prime Cotton Seed Meal.	7	Highest Lowest Average	46.00 40.25 44.50	..... 43.00 .....	11.01 9.64 10.24	9.00
Southern Cotton Oil Co.'s Prime Finely Ground Cotton Seed Meal, Memphis, Tenn., Mill.	9	Highest Lowest Average	46.50 41.38 43.37	..... 43.00 .....	12.38 10.51 11.58	9.00
Southern Cotton Oil Co.'s Prime Finely Ground Cotton Seed Meal, Newport, Ark., Mill.	4	Highest Lowest Average	45.63 45.13 45.38	..... 41.00 .....	11.46 10.48 10.80	9.00
O. Holway & Co.'s Prime Memphis Cotton Seed Meal.	2	Highest Lowest Average	24.44 23.94 24.19	..... 25.50 .....	7.35 6.60 6.98	5.71
Manufacturer unknown. Prime Memphis Cotton Seed Meal.	1	.....	45.13	43.00	13.49	9.00
R. B. Brown Oil Co.'s Prime Cotton Seed Meal.	2	Highest Lowest Average	45.75 44.56 45.66	..... 43.00 .....	13.61 12.83 13.22	9.00
Chapin & Co.'s Cotton Seed Meal.	8	Highest Lowest Average	45.50 42.38 44.05	..... 43.00 .....	11.02 9.25 10.00	9.00
F. W. Brodé & Co.'s Owl Brand Cotton Seed Meal.	10	Highest Lowest Average	48.69 42.80 45.06	..... 43.00 .....	13.40 9.38 10.83	9.00
"Daisy Brand" Cotton Seed Meal.	5	Highest Lowest Average	45.88 42.88 44.90	..... 43.00 .....	14.08 9.42 10.82	9.00
D. M. Hawkins & Co.'s Cotton Seed Meal.	3	Highest Lowest Average	44.81 42.63 43.61	..... 43.00 .....	11.07 10.57 10.76	9.00
Hunter Bros.' Cotton Seed Meal	1	....	45.13	43.00	9.36	9.00
Hugh Petit & Co.'s Cotton Seed Meal.	1	.....	48.38	43.00	8.03	10.00
J. E. Soper & Co.'s Cotton Seed Meal.	3	Highest Lowest Average	44.44 41.19 43.11	..... 43.00 .....	11.65 10.73 11.27	9.00
Dyersburg Oil & Fertilizer Co.'s Cotton Seed Meal.	2	Highest Lowest Average	45.56 43.81 44.69	..... 43.00 .....	9.54 9.04 9.21	9.00
Doten Grain Co.'s Cotton Seed Meal.	1	.....	43.69	43.00	12.16	9.00
Manufacturers unknown. Cotton Seed Meal.	7	Highest Lowest Average	46.81 43.06 45.54	..... 43.00 .....	14.46 9.21 11.27	9.00
Manufacturers unknown. Cotton Seed Meal.	4	Highest Lowest Average	44.81 42.81 43.89	..... 46.12 .....	12.24 10.34 11.26	9.20

## SUMMARY OF ANALYSES—Continued.

	Number of analyses.		PROTEIN.		FAT.	
			Found — per cent.	Guaranteed — per cent.	Found — per cent.	Guaranteed — per cent.
The Glucose Sugar Refin'g Co.'s Chicago Gluten Meal.	14	Highest Lowest Average	38.94 34.50 37.42	..... 38.00 .....	3.61 2.27 3.01	2.00
Charles Pope Glucose Co.'s Cream Gluten Meal.	7	Highest Lowest Average	35.25 30.13 33.23	..... 37.12 .....	4.91 1.84 3.95	3.20
National Starch Man'g Co.'s King Gluten Meal, Indianapo- lis, Ind., Mill.	3	Highest Lowest Average	36.25 34.50 35.35	..... 32.00 .....	6.78 5.67 8.35	16.00
National Starch Man'g Co.'s King Gluten Meal, Des Moines, Iowa, Mill.	8	Highest Lowest Average	34.94 32.06 33.28	..... 32.00 .....	16.91 12.89 15.63	16.00
The Glucose Sugar Refin'g Co.'s Buffalo Gluten Feed.	1	.....	27.00	25.50	4.00	4.00
The Glucose Sugar Refin'g Co.'s Rochford Diamond Gluten Feed.	5	Highest Lowest Average	25.31 21.31 24.34	..... 24.20 .....	5.03 4.16 4.69	3.76
International Milling Co.'s Sucrene Oil Meal.	3	Highest Lowest Average	26.44 23.63 25.50	..... 24.75 .....	3.44 3.26 3.34	3.50
The Cleveland Linseed Oil Co.'s Cleveland Flax Meal.	1	.....	37.00	39.00	3.03	1.50
Mayflower Mill's Old Process Linseed Meal.	1	.....	25.44	.....	8.92	
E. W. Blatchford & Co.'s Blatchford's Calf Meal.	1	.....	24.94	.....	4.41	
American Cereal Co.'s Victor Corn and Oat Feed.	11	Highest Lowest Average	11.25 8.56 9.37	..... 9.46 .....	5.12 3.23 4.05	3.92
S. A. & J. H. True Co.'s Corn and Oat Feed.	2	Highest Lowest Average	9.19 9.13 9.16	..... 9.63 .....	3.42 3.39 3.41	4.23
Commercial Milling Co.'s Ground Corn and Oats.	1	.....	9.44	.....	2.89	
David Oliver's Lakeside Corn and Oat Feed.	1	.....	8.44	9.50	3.24	3.75
The H-O Co.'s Dundee Corn and Oat Feed.	4	Highest Lowest Average	9.25 8.19 8.83	..... 8.38 .....	3.67 2.69 3.19	2.95
Monarch Corn and Oat Feed.	1	.....	12.31	10.25	7.12	7.49
The H-O Co.'s Standard Dairy Feed.	1	.....	16.50	18.75	4.48	7.25
The H-O Co.'s Horse Feed.	1	.....	11.00	12.30	4.42	4.90
The H-O Co.'s Poultry Feed.	2	Highest Lowest Average	17.44 17.31 17.38	..... 16.80 .....	5.87 5.62 5.75	7.00

## SUMMARY OF ANALYSES—Concluded.

	Number of analyses.		PROTEIN.		FAT.	
			Found— per cent.	Guaranteed— per cent.	Found— per cent.	Guaranteed— per cent.
The American Cereal Co.'s Poultry Food.	2	Highest Lowest Average	13.69 13.44 13.57	..... ..... .....	5.93 5.79 5.86	
The American Cereal Co.'s Quaker Oat Feed.	7	Highest Lowest Average	11.69 7.75 9.83	..... 12.03 .....	4.30 3.04 3.66	3.49
W. H. Haskell & Co.'s Haskell's Oat Feed.	1	.....	9.50	9.62	6.51	7.66
Andrew Cullen's Crescent Oat Feed.	1	... ..	7.81	10.90	2.99	3.70
Northwestern Fertilizer Co.'s HorseShoeBrandGround Beef Crackings for Poultry.	2	Highest Lowest Average	66.44 64.63 65.54	..... 60.00 .....	19.61 16.95 18.28	16.00
Bradley Fertilizer Co.'s Bradley's Superior Meat Meal	2	Highest Lowest Average	53.94 52.25 53.10	..... 40.00 .....	9.48 9.40 9.44	15.00
Bowker Fertilizer Co.'s Bowker's Pure Beef Scraps.	1	.....	51.88	.....	14.89	
Bowker Fertilizer Co.'s Bowker's Animal Meal.	3	Highest Lowest Average	46.94 39.69 42.92	... .. 30.00 .....	12.45 10.69 11.45	5.00
B. Randall's Pure Beef Scraps.	1	.....	47.44	.....	23.08	
American Fertilizer Co.'s American Poultry Meal.	1	.....	38.06	... ..	22.44	

[Blank for forwarding samples of feeding stuffs for free analysis.]

.....189....

(Do not write here.)

Station No..... Chas. D. Woods, Director  
Received..... Agricultural Experiment Station,  
Orono, Maine.

Sir: I send you to-day, by mail, a fair sample of a feeding stuff. In addition to the red tax tag each package carried the following statements.

(In case these statements are on a tag, it can be sent instead of a copy of the statement.)

Name of goods .....  
Name of Manufacturer .....  
Per cent. protein..... Per cent. fat.....

The sample was taken by me in accordance with the directions on the back of this sheet, and fairly represents the stock from which it was drawn.

Signature,.....

Post Office address,.....

Witness:\* The above-described sample was taken in my presence.

Signature of Witness,.....

Name of Dealer,.....

Address,.....

---

\*The witness should be the dealer or his representative, a postmaster, or town or city officer.

## FREE ANALYSIS OF FEEDING STUFFS.

---

The Station officers take pains to obtain for analysis samples of all feeding stuffs coming under the law, but the co-operation of consumers is essential for the full and timely protection of their interests. Whenever anyone believes that this law is being evaded in any way, he is requested to notify the Director of the Station.

The Station will promptly analyze samples of feeding stuffs taken in accordance with the following directions and report the results to the interested parties. Dealers and consumers are urged to avail themselves of this offer.

### DIRECTIONS FOR SAMPLING.

The sample should fairly represent the feeding stuff and is best obtained as follows:

Open one or more full and unbroken packages, and mix well together the contents of each for a foot in depth, take out three cupfuls from different parts of the mixed portions of each package, pour them one over another upon a paper, intermix thoroughly and fill a tin spice or baking powder box from the mixture. Detach this leaf, fill out the blank on the opposite side, securely wrap the box and blank in paper and send by mail to the

Agricultural Experiment Station,  
Orono, Maine.